



JFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: W.D. Grover et al. Attorney Docket No.: LAMA121377
Application No.: 10/613,531 Group Art Unit: 2643
Filed: July 2, 2003
Title: METHOD FOR DESIGN OF NETWORKS BASED ON P-CYCLES

INFORMATION DISCLOSURE STATEMENT

Seattle, Washington 98101

September 3, 2004

TO THE COMMISSIONER FOR PATENTS:

Applicants are aware of the information listed in the attached form that may be material to the prosecution of the above-identified patent application.

1. X Pursuant to 37 C.F.R. § 1.97(b), this Information Disclosure Statement is being filed within three months of the filing date of the national application (other than a CPA), within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, before the mailing date of a first Office Action on the merits, or before the mailing date of a first Office Action after the filing of an RCE.

Respectfully submitted,

CHRISTENSEN O'CONNOR
JOHNSON KINDNESS^{PLLC}

Kevan L. Morgan
Registration No. 42,015
Direct Dial No. 206.695.1712

I hereby certify that this correspondence is being deposited with the U.S. Postal Service in a sealed envelope as first class mail with postage thereon fully prepaid and addressed to **Mail Stop Amendment**, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the below date.

Date: September 3, 2004

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

**Information Cited by the Applicant(s) that may be Material
to the Prosecution of the Subject Application**

Re: Application Serial No. 10/613,531
Applicant: W.D. Grover et al.
Title: METHOD FOR DESIGN OF NETWORKS BASED ON p-CYCLES
Filed: July 2, 2003 page 1 of 3

United States Patent Documents

<u>Examiner Initial</u>	<u>ID</u>	<u>Document Number</u>	<u>Date</u>	<u>Name</u>	<u>Class</u>	<u>Sub Class</u>
_____	A1	4,956,835	09/11/1990	Grover	370	228
_____	A2	5,850,505	12/15/1998	Grover et al.	714	4
_____	A3	6,052,796	04/18/2000	Croslin	714	4
_____	A4	6,331,905	12/18/2001	Ellinas et al.	398	2
_____	A5	2002/0187770	12/12/2002	Grover et al.	455	403
_____	A6	09/561,355	04/28/2000	Grover	714	

Foreign Patent Documents

<u>Examiner Initial</u>	<u>ID</u>	<u>Document Number</u>	<u>Date</u>	<u>Country</u>	<u>Class</u>	<u>Sub Class</u>	<u>Trans- lation?</u>
_____	B1	2,161,847 (Corresponds to A2 above)	10/31/1995	Canada			N/A
_____	B2	2,360,963 (Corresponds to A5 above)	11/02/2001	Canada			N/A
_____	B3	2,307,520 (Corresponds to A6 above)	04/28/2000	Canada			N/A

**Information Cited by the Applicant(s) that may be Material
to the Prosecution of the Subject Application**

Re: Application Serial No. 10/613,531
Applicant: W.D. Grover et al.
Title: METHOD FOR DESIGN OF NETWORKS BASED ON p-CYCLES
Filed: July 2, 2003 page 2 of 3

Other Information

(Include author, title, date of publication to extent known, relevant pages, and place of publication if known)

Examiner

<u>Initial</u>	<u>ID</u>	<u>Document Identification</u>
_____	C1	M. Herzberg, S.J. Bye, "An optimal spare-capacity assignment model for survivable networks with hop limits", <i>IEEE Globecom 1994</i> , pp. 1601-1607
_____	C2	W.D. Grover, "Distributed restoration of the transport network", in <i>Network Management into the 21st Century</i> , editors T. Pleyvak, S. Aidarous, <i>IEEE/IEE Press Co-publication</i> , Chapter 11, pp. 337-417, Feb. 1994.
_____	C3	R.R. Iraschko, M.H. MacGregor, W.D. Grover, "Optimal capacity placement for path restoration in mesh survivable networks", <i>ICC 1996</i> , Dallas, June 1996, pp. 1568-1574
_____	C4	W.D. Grover, D.Y. Li, "The forcer concept and express route planning in mesh-survivable networks", <i>Journal of Network and Systems Management</i> , Vol. 7, No. 2, 1999, pp. 199-223
_____	C5	W.D. Grover, M.H. MacGregor, "Potential for spare capacity preconnection to reduce crossconnection workloads in mesh-restorable networks", <i>Electronics Letters</i> , Fe. 3, 1994, Vol. 30, No. 3, pp 194-195
_____	C6	W.D. Grover, D. Stamatelakis, "Self-organizing closed path configuration of restoration capacity in broadband mesh transport networks", <i>CCBR '98</i> , June 1998, 12 pages
_____	C7	R. Kawamura, K. Sato, I. Tokizawa, "Self-healing ATM networks based on virtual path concept", <i>IEEE Journal on Selected Areas in Communication</i> , Vol. 12, no. 1, Jan. 1994, pp. 120-127
_____	C8	R.R. Iraschko, "Path Resorable Networks", PhD Thesis, Edmonton, Alberta, 1996, pp. 56-85
_____	C9	W.D. Grover, J.B. Slevinsky, M.H. MacGregor, "Optimized design of ring-based survivable networks", <i>Can. J. Elect. & Comp. Eng.</i> , Vol. 20, No. 3, 1995, pp. 139-149
_____	C10	W.D. Grover, D. Stamatelakis, "Cycle-oriented distribution preconfiguration: Ring-like speed with mesh-like capacity for self-planning network restoration", <i>ICC '98</i> , June 1998, 7 pages
_____	C11	D. Stamatelakis, "Theory and algorithms for preconfiguration of spare capacity in mesh restorable networks", M.Sc. Thesis, 1997

**Information Cited by the Applicant(s) that may be Material
to the Prosecution of the Subject Application**

Re: Application Serial No. 10/613,531
Applicant: W.D. Grover et al.
Title: METHOD FOR DESIGN OF NETWORKS BASED ON p-CYCLES
Filed: July 2, 2003 page 2 of 3

- _____ C12 R.R. Iraschko, M.H. MacGregor, W.D. Grover, "Optimal capacity placement for path restoration in STM or ATM mesh-survivable networks", *IEEE/ACM Trans. On Networking*, Vol. 6, No. 3, June 1998, pp. 325-336

- _____ C13 W.D. Grover, R.R. Iraschko, Y. Zheng, "Comparative methods and issues in design of mesh-restorable STM and ATM networks", *Telecommunication Network Planning*, pp. 169-200, editors: B. Sanso and P. Soriano, Kluwer Academic Publishers, 1999

- _____ C14 B.A. Coan, W.E. Leland, M.P. Vecchi, A. Weinrib, L.T. Wu, "Using distributed topology update and preplanned configurations to achieve trunk network survivability", *IEEE Trans. On Reliability*, Vol. 40, No. 4, Oct. 1991, pp. 404-427

- _____ C15 B.A. Coan, M.P. Vecchi, L.T. Wu, "A distributed protocol to improve the survivability of trunk networks", *13th International Teletraffic Congress 1991*, June 17-26, 1991, 7 pages

- _____ C16 D.A. Schupke, C.G. Gruber, A. Autenrieth, "Optimal configuration of *p*-cycles in WDM networks", *ICC 2002*, 5 pages

- _____ C17 W. Grover, J. Doucette, M. Clouqueur, D. Leung, "New options and insights for survivable transport networks", *IEEE Communications Magazine*, vol. 40, no. 1, pp. 34-41, Jan. 2002

- _____ C18 Y. Xiong, L.G. Mason, "Restoration strategies and spare capacity requirements in self-healing ATM networks", *IEEE/ACM Transactions on Networking*, vol. 7, no. 1, Feb. 1999, pp. 98-110

- _____ C19 W.Grover, D. Stamatelakis, "Bridging the ring-mesh dichotomy with *p*-cycles", *IEEE/VDE DRCN 2000*, Munich, Germany, pp. 92-104, April 2000

Examiner: _____

Date Considered: _____

[Examiner: Initial if reference considered, whether or not citation is in conformance with M.P.E.P; draw line through citation is not in conformance and not considered. Include copy of this form with next communication to applicant]